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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,132	09/22/1999	HUNG-JU LEE	SAR-12598A	4242

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EXAMINER

BUGG, GEORGE A

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/401,132

Applicant(s)

LEE ET AL.

Examiner

George A Bugg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,606,371 to Gunnewiek et al

3. As for claim 22, Gunnewiek discloses a computer implemented method for allocating bits to encode an image frame sequence, the method comprising the steps of determining a target frame bit rate and allocating the target frame bit rate among at least one object (Col. 2, Lines 22-38).

4. Claims 22-28 and 32-38 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,790,196 to Sun et al.

5. As for claims 22-28 and 32-38, Sun discloses a computer implemented method and apparatus for allocating bits to encode an image frame sequence comprising means for: determining a target frame bit rate (Col. 3, Line 18); allocating the target frame bit rate among at least one object (Col. 3, Lines 18-19); allocating the target frame bit rate in accordance with a target object rate for the at least one object (Col. 3, Lines 17-24); wherein the target object bit rate is selected in accordance with a mean absolute difference of the object (Col. 4, Lines 40-43); wherein the target object bit rate is adjusted in accordance with a buffer fullness measure (Col. 3, Line 19); wherein the target object bit rate is allocated to code syntax information, motion information, and shape information of the object (Abstract, Lines 3-4); generating a quantizer scale for the object in accordance with the target object bit rate (Col. 3, Lines 22-24); and encoding the object with the quantizer scale (Col. 3, Lines 23-24).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,790,196 to Sun et al., in view of U.S. Patent No. 5,606,371 to Gunnewiek et al.

8. As for claims 29 and 30, Sun discloses the present invention as claimed, except for the specific structure of a predictive coder, as set forth in claim 13. Gunnewiek

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shows the well-known elements of a predictive coder in Figure 1. Motion compensator (Elements 28 and 29); transform module (Element 22); and a quantizer (Element 23).

9. As for claim 31, Sun also discloses the target object bit rate being derived from a target frame bit rate (Col. 3, Lines 14-19). It would have been obvious to one of ordinary skill in the art to combine these embodiments, for the purpose of increasing coding efficiency.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (703) 305-2329. The examiner can normally be reached on Monday-Thursday from 7:30 to 5:00. The examiner can also be reached on alternate Fridays during the same time frame.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S Kelley, can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5359.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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George A Bugg  
Examiner  
Art Unit 2613



CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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